***NUMBER PROBLEMS***

Source: <http://webhome.broward.edu/~hsorkin/I-Math/Supp-2/Supp-2.PDF>

Solve on a separate sheet of paper.

1. When 4 times a number is increased by 40, the answer is the same as when 100 is decreased by the number. Find the number.

2. When 7 times a number is decreased by 8, the answer is the same as when 3 times the number is increased by 4. Find the number.

3. Eight times a number increased by 9 is the same as 15 more than 7 times the number. Find the number.

4. Thirty decreased by 6 times a number is the same as 16 more than the number. Find the number.

5. When 6 times a number is increased by 11 the result is 16 less than 9 times the number. Find the number.

6. One number is twice another number. If the 12 is subtracted from the larger number the result is 7 more than the smaller number. Find the numbers.

7. The larger of two numbers is 10 more than the smaller number. Five times the larger number is 40 more than 6 times the smaller. Find the numbers.

8. If 13 is added to a number and the sum is multiplied by 3, the result is 7 times the number decreased by 9. Find the number.

9. The sum of two numbers is 57. If the larger of the two numbers is 9 less than twice the smaller, find the two numbers.

10. The total of two numbers is 35. Four times the larger number is 4 less than five times the smaller number. Find the two numbers.

11. A piece of lumber which is 55 inches long is cut into two parts such that 2 times the larger part will be 12 more than 5 times the smaller part. How large are each of the pieces of lumber?

12. The larger of two numbers is 6 less than 3 times the smaller number. Three times the larger number is 7 more than 4 times the smaller number. Find the numbers.

13. The larger of two numbers is 7 times the smaller. The larger number exceeds the smaller number by 42. Find the numbers.

14. The smaller of two numbers is 18 less than the larger number. If 5 times the larger number exceeds 4 times the smaller number by 100. Find the numbers.

15. A piece of fabric 180 inches long is cut into two pieces such that 3 times the larger piece exceeds 4 times the smaller piece by 85 inches. How large are the two pieces of fabric?